

EXHIBIT 9
[Filed Under Seal]

Privacy Scenarios Analysis Plan

Last updated: July 31, 2019

Working group

Stakeholders: Chetna Bindra, Nitish Korula, Rahul Srinivasan, Scott Spencer

- Apps
 - APAT - Conor, Eddie (buyside), Kenny (consulting), Connie
 - Sellside - Yan Zhang, Heeten
 - Noether (Buyside) leads
 - PM: Peter Sologoub, Lawrence Chang, Vinod Koverkathu (OTT)
 - Eng: EuJin, Karthik
- Web
 - APAT - Andrey, Connie
 - Sellside - Heeten, Steven DeLong, Hyewon Jun
 - Buyside - Deepak Ravichandran, Yijian Bai, Wei Shi
 - Finance - Ben Malthus (Display), Atanas? (Search), TBD (YT)
- Youtube
 - APAT - Tarun, Connie
 - Eng - Vic Liu

AI (ccchoi): Send weekly updates to this group!

When ITP2 was announced, where did the money shift?

Kai brodersen, Romil (budgeting), Matt (optional) - original model guy?, Basar (ITP, PM),

EOM on Noether, ACM - they could use these #s as well

Apps

Experiments; Impact of losing 1P cookie, IDFA, App ID

IDFA [REDACTED] of effectiveness of campaign

iOS

Conversion tracking, ACE, install campaigns - we are still ok, use GCLID BUT need google SDK (firebase)

% of revenue firebase coverage SDK when looking at ACE (lower bound)

2nd order: scramble to update SDKs

App ID

Gaia, [REDACTED] sign-in, play install info no scenarios where we are blind from a technical standpoint

May be self blinded from a policy standpoint

OTT

Haven't looked into this

Check with Android TV team vkk@

Dimensions - What are the scenarios? (Web, conversions from Web for App)

	No 3P Cookies	3P Cookies, w/constraints
GKS ¹	X	✓
3P Cookies	X	✓
1P Cookies ²	?	✓
IDFA / ADID (Apps)	X	✓
Privacy-preserving APIs - GCLID	✓	✓
Fingerprinting / link decoration ³	X	X
ID Consortium using 1P - Tech standards - Server-to-server	?	✓
Other considerations?	<ul style="list-style-type: none"> • Consent rate change (Narnia3) • Limits on data sharing • Limits on data retention / use 	

[1] GKS may not be available in no 3P cookie condition. GKS could be tied to 3P cookies in Chrome.

[2] Google maybe. Others may take action against this explicitly

[3] Google no. Others do this already / might start doing this

Dimensions - Apps

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Rasta experiments

	RASTA Experiments
GKS ¹	Experiment - No GKS & No 3P Cookies. Non-Safari.
3P Cookies	Experiment - No GKS & No 3P Cookies. Non-Safari.
1P Cookies ²	ITP2 Simulation - No personalization or frequency capping. Chrome.
IDFA / ADID (Apps)	No ID Experiments - iOS only <ul style="list-style-type: none"> Do we anything for Android?
Privacy-preserving APIs - GCLID	
Fingerprinting / link decoration ³	<ul style="list-style-type: none"> Potentially a demand shift away from Google
ID Consortium using 1P - Tech standards - Server-to-server	
Other considerations?	<ul style="list-style-type: none"> Consent rate change 3P Cookie TTL Limits on data sharing Limits on data retention / use

[1] GKS may not be available when user opts out of 3P cookies ()

[2] Google maybe. Others may take action against this explicitly

[3] Google no. Others do this already / might start doing this

Id	Date	Text
1	07/31/2019 15:35:43	+deepakr@google.com I've added the experiment results we used in prior analyses. Please supplement any additional experiments you think will be helpful! _Assigned to Deepak Ravichandran_

No 3P Cookies - Scope

Products

- Display buy-side - DBM, GDN, AdX
- Search remarketing (+AFS)
- Youtube remarketing

Platforms / browsers

- Chrome, Safari
- Mobile, desktop, web, webview
- iOS, Android, OTT (Apps)
- Signed in vs. signed out

Differentiating between AdID going away (iOS, Android) vs. 3P Cookies going away (Chrome)

AI (Deepak, Yijian): RASTA experiment, documentation [here](#)

No 3P Cookies - Effects

First order effects

Direct impacts due to the loss of 3P cookie (web) and device ID (app)

- Bidding
- Targeting
- Attribution / measurement

Second order effects

Conscious decisions made by advertisers or publishers in response to the change

- Where does the lost \$\$\$ go?
 - Other Ad Tech companies (which ones?)
 - Other walled gardens w/Ad Tech
 - Redistributed back to Google
 - Redistribution across channels
- Organic search impact

- Other walled gardens w/Ad Tech = FB, AMZN
- Yavin(?)
- Organic search impact - E.g. What happens when the long-tailed pubs no longer appear in search results?
- May need to add channel breakdown (e.g. Display vs. others)

Appendix

Youtube remarketing not affected because viral stack, not 3P cookie
RSLA currently still works because it's getting remarketing lists from other
browsers
We would just lose the premium

Analysis resources

[Chrome model \(go/chromeabb\)](https://go/chromeabb)

[App Network IDFA Deprecation Model](#)

No 3P Cookies

No 3P cookies. Strong enforcement against fingerprinting, but potentially some ID consortia. Identity continues to exist in walled gardens.

- Publishers shift inventory to walled gardens
 - Google demand weakens (e.g. no cookies on FB webviews)
 - Indirect effect on Search
 - Larger pubs (re)turning increasingly to direct deals with their largest advertisers
 - DBM no longer has identity when buying on 3PE
 - AdX buyers shift to header bidding
 - Google may shift to bid using privacy-preserving APIs / federated learning techniques, if they exist
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- What are the innovations that Google will be doing to address changes?
 - How are we supporting publishers for each change
 - Ask Tarun about Youtube impact on remarketing -- might not have an impact

3P Cookies (w/constraints)

World in which third-party cookies continue to exist, but with some constraints.

- Google limits data usage or retention, reducing remarketing revenue.
- Users have opt-outs and controls, enforced by regulation. This could also affect monetization negatively
- Walled gardens may still be exempt in this world, but the hope is that the monetization delta would be reduced.
- DBM buying on 3PE and AdX buyers could get identifiers when the user has not opted out, and we can bid using privacy-preserving APIs for the other users, if these APIs exist